<u>RAW SEQUENCE LISTING</u>

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.

Application Serial Number: _09/955,502A_
Source: _1Fw16_
Date Processed by STIC: _12/30/05_

ENTERED

IFW16

RAW SEQUENCE LISTING　　　　　　　　　　　DATE: 12/30/2005
PATENT APPLICATION: **US/09/955,502A**　　　　TIME: 09:32:37

Input Set : **A:\960296.97559.txt**
Output Set: **N:\CRF4\12302005\I955502A.raw**

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 3 <110> APPLICANT: Downs, Diana M.
 4         Gralnick, Jeff A.
 6 <120> TITLE OF INVENTION: Method for Preventing Superoxide Damage to Cells and
 7         Oxygen-Labile Proteins
 9 <130> FILE REFERENCE: 960296.97559
11 <140> CURRENT APPLICATION NUMBER: US/09/955,502A
11 <141> CURRENT FILING DATE: 2001-09-18
11 <160> NUMBER OF SEQ ID NOS: 45
13 <170> SOFTWARE: PatentIn version 3.3
15 <210> SEQ ID NO: 1
16 <211> LENGTH: 65
17 <212> TYPE: PRT
18 <213> ORGANISM: Artificial
20 <220> FEATURE:
21 <223> OTHER INFORMATION: synthetic YggX consensus sequence
24 <220> FEATURE:
25 <221> NAME/KEY: UNSURE
26 <222> LOCATION: (2)..(2)
27 <223> OTHER INFORMATION: can be any amino acid
29 <220> FEATURE:
30 <221> NAME/KEY: UNSURE
31 <222> LOCATION: (4)..(6)
32 <223> OTHER INFORMATION: can be any amino acid
34 <220> FEATURE:
35 <221> NAME/KEY: UNSURE
36 <222> LOCATION: (8)..(22)
37 <223> OTHER INFORMATION: can be any amino acid
39 <220> FEATURE:
40 <221> NAME/KEY: UNSURE
41 <222> LOCATION: (24)..(26)
42 <223> OTHER INFORMATION: can be any amino acid
44 <220> FEATURE:
45 <221> NAME/KEY: UNSURE
46 <222> LOCATION: (28)..(38)
47 <223> OTHER INFORMATION: can be any amino acid
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50 <221> NAME/KEY: UNSURE
51 <222> LOCATION: (40)..(41)
52 <223> OTHER INFORMATION: can be any amino acid
54 <220> FEATURE:
55 <221> NAME/KEY: UNSURE
56 <222> LOCATION: (43)..(45)
57 <223> OTHER INFORMATION: can be any amino acid
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C--> (line 11, <140>)
C--> (line 11, <141>)

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 60 <221> NAME/KEY: UNSURE
 61 <222> LOCATION: (48)..(48)
 62 <223> OTHER INFORMATION: can be any amino acid
 64 <220> FEATURE:
 65 <221> NAME/KEY: UNSURE
 66 <222> LOCATION: (50)..(50)
 67 <223> OTHER INFORMATION: can be any amino acid
 69 <220> FEATURE:
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 71 <222> LOCATION: (53)..(54)
 72 <223> OTHER INFORMATION: can be any amino acid
 74 <220> FEATURE:
 75 <221> NAME/KEY: UNSURE
 76 <222> LOCATION: (56)..(62)
 77 <223> OTHER INFORMATION: can be any amino acid
 79 <220> FEATURE:
 80 <221> NAME/KEY: UNSURE
 81 <222> LOCATION: (64)..(65)
 82 <223> OTHER INFORMATION: can be any amino acid
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 87 1               5                   10                  15
W--> 90 Xaa Xaa Xaa Xaa Xaa Xaa Pro Xaa Xaa Xaa Gly Xaa Xaa Xaa Xaa Xaa
 91                 20                  25                  30
W--> 94 Xaa Xaa Xaa Xaa Xaa Xaa Trp Xaa Xaa Trp Xaa Xaa Xaa Gln Thr Xaa
 95             35                  40                  45
W--> 98 Leu Xaa Asn Glu Xaa Xaa Leu Xaa Xaa Xaa Xaa Xaa Xaa Xaa Arg Xaa
 99     50                  55                  60
W--> 102 Xaa
 103 65
 106 <210> SEQ ID NO: 2
 107 <211> LENGTH: 87
 108 <212> TYPE: PRT
 109 <213> ORGANISM: Bordetella pertussis
 111 <400> SEQUENCE: 2
 113 Met Ser Arg Ile Val Asn Cys Val Lys Leu Lys Arg Glu Ala Glu Gly
 114 1               5                   10                  15
 117 Leu Asp Phe Pro Pro Tyr Pro Gly Glu Leu Gly Thr Arg Ile Trp Gln
 118             20                  25                  30
 121 Gln Ile Ser Lys Glu Ala Trp Glu Glu Trp Lys Gln Ile Gln Thr Arg
 122             35                  40                  45
 125 Leu Val Asn Glu Asn Arg Leu Asn Leu Ala Asp Ala Arg Ala Arg Lys
 126     50                  55                  60
 129 Tyr Leu Gln Gln Gln Met Glu Arg Phe Leu Phe Glu Asp Gly Thr Val
 130 65                  70                  75                  80
 133 Glu Ala Gln Gly Tyr Val Pro
 134                 85
 137 <210> SEQ ID NO: 3
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138 <211> LENGTH: 87
139 <212> TYPE: PRT
140 <213> ORGANISM: Bordetella parapertussis
142 <400> SEQUENCE: 3
144 Met Ser Arg Ile Val Asn Cys Val Lys Leu Lys Arg Glu Ala Glu Gly
145 1               5                   10                  15
148 Leu Asp Phe Pro Pro Tyr Pro Gly Glu Leu Gly Thr Arg Ile Trp Gln
149             20                  25                  30
152 Gln Ile Ser Lys Glu Ala Trp Glu Glu Trp Lys Gln Ile Gln Thr Arg
153         35                  40                  45
156 Leu Val Asn Glu Asn Arg Leu Asn Leu Ala Asp Ala Arg Ala Arg Lys
157     50                  55                  60
160 Tyr Leu Gln Gln Gln Met Glu Arg Phe Leu Phe Glu Asp Gly Thr Val
161 65                  70                  75                  80
164 Glu Ala Gln Gly Tyr Val Pro
165                 85
168 <210> SEQ ID NO: 4
169 <211> LENGTH: 86
170 <212> TYPE: PRT
171 <213> ORGANISM: Bordetella bronchiseptica
173 <400> SEQUENCE: 4
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179 Leu Asp Phe Pro Pro Tyr Pro Gly Glu Leu Gly Thr Arg Ile Trp Gln
180             20                  25                  30
183 Gln Ile Ser Lys Glu Ala Trp Glu Glu Trp Lys Gln Ile Gln Thr Arg
184         35                  40                  45
187 Leu Val Asn Glu Asn Arg Leu Asn Leu Ala Asp Ala Arg Ala Arg Lys
188     50                  55                  60
191 Tyr Leu Gln Gln Gln Met Glu Arg Phe Leu Phe Glu Asp Gly Thr Val
192 65                  70                  75                  80
195 Glu Ala Gln Gly Val Pro
196                 85
199 <210> SEQ ID NO: 5
200 <211> LENGTH: 91
201 <212> TYPE: PRT
202 <213> ORGANISM: Actinobacillus actinomycetemcomitans
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206 Met Ala Arg Met Val Phe Cys Glu Arg Leu Lys Gln Glu Ala Glu Gly
207 1               5                   10                  15
210 Leu Asp Phe Gln Leu Tyr Pro Gly Glu Leu Gly Lys Arg Ile Phe Asp
211             20                  25                  30
214 Ser Ile Ser Lys Gln Ala Trp Gly Glu Trp Met Lys Lys Gln Thr Met
215         35                  40                  45
218 Leu Val Asn Glu Lys Lys Leu Asn Met Met Asn Ala Glu His Arg Lys
219     50                  55                  60
222 Leu Leu Glu Gln Glu Met Val Asn Phe Leu Phe Glu Gly Lys Asp Val
223 65                  70                  75                  80
226 His Ile Glu Gly Tyr Thr Pro Pro Glu Ala Lys
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RAW SEQUENCE LISTING   DATE: 12/30/2005
PATENT APPLICATION: US/09/955,502A   TIME: 09:32:37

Input Set : A:\960296.97559.txt
Output Set: N:\CRF4\12302005\I955502A.raw

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227                     85                      90
230 <210> SEQ ID NO: 6
231 <211> LENGTH: 87
232 <212> TYPE: PRT
233 <213> ORGANISM: Pasteurella multocida
235 <400> SEQUENCE: 6
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238 1               5                  10                  15
241 Leu Asp Phe Gln Leu Tyr Pro Gly Glu Leu Gly Lys Arg Ile Phe Asp
242             20                  25                  30
245 Ser Ile Ser Lys Gln Ala Trp Arg Glu Trp Met Lys Lys Gln Thr Met
246         35                  40                  45
249 Leu Val Asn Glu Lys Lys Leu Asn Met Met Asn Ala Asp His Arg Gln
250     50                  55                  60
253 Leu Leu Glu Gln Glu Met Val Asn Phe Leu Phe Glu Gly Lys Asp Val
254 65                  70                  75                  80
257 His Ile Glu Gly Tyr Val Pro
258                 85
261 <210> SEQ ID NO: 7
262 <211> LENGTH: 87
263 <212> TYPE: PRT
264 <213> ORGANISM: Haemophilus influenzae
266 <400> SEQUENCE: 7
268 Met Ala Arg Thr Val Phe Cys Glu Tyr Leu Lys Lys Glu Ala Glu Gly
269 1               5                  10                  15
272 Leu Asp Phe Gln Leu Tyr Pro Gly Glu Leu Gly Lys Arg Ile Phe Asp
273             20                  25                  30
276 Ser Val Ser Lys Gln Ala Trp Gly Glu Trp Ile Lys Lys Gln Thr Met
277         35                  40                  45
280 Leu Val Asn Glu Lys Lys Leu Asn Met Met Asn Ala Glu His Arg Lys
281     50                  55                  60
284 Leu Leu Glu Gln Glu Met Val Asn Phe Leu Phe Glu Gly Lys Asp Val
285 65                  70                  75                  80
288 His Ile Glu Gly Tyr Val Pro
289                 85
292 <210> SEQ ID NO: 8
293 <211> LENGTH: 87
294 <212> TYPE: PRT
295 <213> ORGANISM: Haemophilus ducreyi
297 <400> SEQUENCE: 8
299 Met Ala Arg Met Val Phe Cys Glu Tyr Leu Lys Lys Glu Ala Glu Gly
300 1               5                  10                  15
303 Leu Asp Phe Gln Leu Tyr Pro Gly Glu Leu Gly Lys Arg Ile Phe Asn
304             20                  25                  30
307 Ser Ile Ser Lys Gln Ala Trp Ala Glu Trp Ile Lys Lys Gln Thr Met
308         35                  40                  45
311 Leu Val Asn Glu Lys Lys Leu Asn Met Met Asn Pro Glu His Arg Gln
312     50                  55                  60
315 Leu Leu Glu Ala Glu Met Val Asn Phe Leu Phe Glu Gly Lys Asp Val
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316 65                  70                  75                  80
319 His Ile Asp Gly Tyr Val Pro
320                     85
323 <210> SEQ ID NO: 9
324 <211> LENGTH: 88
325 <212> TYPE: PRT
326 <213> ORGANISM: Shewanella putrefaciens
328 <400> SEQUENCE: 9
330 Met Ala Arg Thr Val Asn Cys Val His Leu Asn Lys Glu Ala Asp Gly
331 1               5               10              15
334 Leu Asp Phe Gln Leu Tyr Pro Gly Asp Leu Gly Lys Arg Ile Phe Asp
335             20              25              30
338 Asn Ile Ser Lys Glu Ala Trp Gly Leu Trp Gln Lys Lys Gln Thr Met
339         35              40              45
342 Leu Ile Asn Glu Lys Lys Leu Asn Met Met Asn Val Asp Asp Arg Lys
343     50              55              60
346 Phe Leu Glu Ala Gln Met Thr Ser Phe Leu Phe Glu Gly Lys Asp Val
347 65                  70                  75                  80
350 Glu Ile Glu Gly Phe Val Pro Glu
351                     85
354 <210> SEQ ID NO: 10
355 <211> LENGTH: 90
356 <212> TYPE: PRT
357 <213> ORGANISM: Vibrio cholerae
359 <400> SEQUENCE: 10
361 Met Ala Arg Thr Val Phe Cys Thr Arg Leu Gln Lys Glu Ala Asp Gly
362 1               5               10              15
365 Leu Asp Phe Gln Leu Tyr Pro Gly Glu Leu Gly Lys Arg Ile Phe Asp
366             20              25              30
369 Asn Ile Cys Lys Glu Ala Trp Ala Gln Trp Gln Thr Lys Gln Thr Met
370         35              40              45
373 Leu Ile Asn Glu Lys Lys Leu Asn Met Met Asp Pro Glu His Arg Lys
374     50              55              60
377 Leu Leu Glu Gln Glu Met Val Asn Phe Leu Phe Glu Gly Lys Glu Val
378 65                  70                  75                  80
381 His Ile Glu Gly Tyr Thr Pro Pro Ala Lys
382             85                  90
385 <210> SEQ ID NO: 11
386 <211> LENGTH: 91
387 <212> TYPE: PRT
388 <213> ORGANISM: Escherichia coli K-12 MG1655
390 <400> SEQUENCE: 11
392 Met Ser Arg Thr Ile Phe Cys Thr Phe Leu Gln Arg Glu Ala Glu Gly
393 1               5               10              15
396 Gln Asp Phe Gln Leu Tyr Pro Gly Glu Leu Gly Lys Arg Ile Tyr Asn
397             20              25              30
400 Glu Ile Ser Lys Glu Ala Trp Ala Gln Trp Gln His Lys Gln Thr Met
401         35              40              45
404 Leu Ile Asn Glu Lys Lys Leu Asn Met Met Asn Ala Glu His Arg Lys
```

RAW SEQUENCE LISTING ERROR SUMMARY   DATE: 12/30/2005
PATENT APPLICATION: **US/09/955,502A**   TIME: 09:32:38

Input Set : **A:\960296.97559.txt**
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Please Note:
Use of n and/or Xaa have been detected in the Sequence Listing. Please review the
Sequence Listing to ensure that a corresponding explanation is presented in the <220>
to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:1; Xaa Pos. 2,4,5,6,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,24,25
Seq#:1; Xaa Pos. 26,28,29,30,31,32,33,34,35,36,37,38,40,41,43,44,45,48,50
Seq#:1; Xaa Pos. 53,54,56,57,58,59,60,61,62,64,65

Invalid <213> Response:
Use of "Artificial" only as "<213> Organism" response is incomplete,
per 1.823(b) of New Sequence Rules. Valid response is Artificial Sequence.

Seq#:1

VERIFICATION SUMMARY   DATE: 12/30/2005
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Input Set : **A:\960296.97559.txt**
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L:11 M:270 C: Current Application Number differs, Replaced Current Application No
L:11 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:86 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1 after pos.:0
L:90 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1 after pos.:16
L:94 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1 after pos.:32
L:98 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1 after pos.:48
L:102 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1 after pos.:64
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